



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 4 1997

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Dennis L. McFadden, Manager
Toxicology & Regulatory Affairs
Gustafson, Inc.
P.O. Box 660065
Dallas, TX 75266-0065

Subject: Review of Product Chemistry: 1-Year Storage Stability
Alternate Container Disposal Statement Label Amendment
Raxil®-Thiram Flowable Fungicide EPA Reg. No. 7501-151
Your Letter Dated April 14, 1997 and July 7, 1997

Dear Mr. McFadden:

The Agency has completed its review of the one-year storage stability data (MRID 44292101). The storage stability data submitted corresponding to guideline reference 63-17 (830.6317) satisfy the data requirements of 40 CFR Sec. 158.190.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable with the following conditions:

1. Change the footnote to the ingredient statement from "Contains 1.72 pounds Thiram per U.S. gallon." to "Contains 1.84 pounds Thiram per U.S. gallon."
2. Submit and/or cite all data required for registration or re-registration of your product under FIFRA sec. 3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.
3. Please submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.



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contains at least 50% recycled fiber

If you have any questions, then please contact Terri Stowe of my staff at (703) 305-6117.

Sincerely,

Mary L. Waller

Mary L. Waller
Acting Product Manager (21)
Fungicide Branch
Registration Division (7505C)

Enclosure

Alternate container disposal
statement for returnables

3/5

RAXIL® - Thiram

Flowable Fungicide

ACCEPTED
with COMMENTS
In EPA Letter Dated

NOV 4 1997

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
7501-151

ACTIVE INGREDIENT:

Alpha-[2-(4-Chlorophenyl)ethyl]-alpha-(1,1-dimethyl-ethyl)-1H-1,2,4-triazole-1-ethanol 0.6%
Thiram (Tetramethylthiuram disulfide) 20.0%
INERT INGREDIENTS: 79.4%

TOTAL 100.0%

Contains 0.055 pounds Alpha-[2-(4-Chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol and 1.72 pounds Thiram per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

See additional precautionary statements.

EPA Reg. No. 7501-151

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart. Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate or nitrile rubber or neoprene rubber or Viton, shoes plus socks, protective eyewear and dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Continued Next Column

USER SAFETY RECOMMENDATIONS:

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger or blunt object. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF EYES ARE CONTAMINATED: Wash with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

IF INHALED: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

SYMPTOMS OF POISONING: No specific symptoms. Acute poisoning is accompanied by general depression and illness. Consumption of alcoholic beverages with exposure to thiram may cause flushing, breathing difficulty, nausea, vomiting and low blood pressure. In case of poisoning, call a physician immediately. Have patient lie down and keep quiet.

NOTE TO PHYSICIAN: No specific antidote is available. Treat symptomatically. In the presence of consumption of alcoholic beverages, thiram responds similar to disulfiram.

ENVIRONMENTAL HAZARDS

This pesticide product is toxic to fish. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Cover or incorporate spilled treated seeds.

Gustafson



DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the areas during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical resistant gloves, such as barrier laminate or nitrile rubber or neoprene rubber or Viton, shoes plus socks, and protective eyewear.

STORAGE AND DISPOSAL

STORAGE: Store in a cool, dry place.
PROHIBITIONS: Do not contaminate water, food or feed by storage, disposal, or by cleaning of equipment. Do not reuse empty container. Open dumping is prohibited.
PESTICIDE DISPOSAL: This pesticide's wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional office for guidance.
CONTAINER DISPOSAL: Contact Gustafson or your chemical supplier for container return instructions. If container is not returned in accordance with instructions, triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

RAXIL-Thiram Flowable Fungicide combines the systemic action of RAXIL with the surface action of Thiram to control or suppress various seed, seedling and soilborne diseases of wheat, barley, and oats.

SEED LABELING

To meet U.S. Federal Seed Act requirements, all seed treated with RAXIL-Thiram Flowable Fungicide should be labeled:

TREATED SEED.

DO NOT USE FOR FOOD, FEED OR OIL PURPOSES.

Treated with Alpha-[2-(4-Chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol (RAXIL) and Tetramethylthiuram disulfide (Thiram).

RESTRICTIONS

Do not use treated seed for feed, food or oil purposes. Seed labeling must contain the following restriction: "Do not graze Barley and Wheat for 31 days and Oats for 30 days after planting."

RECOMMENDED APPLICATIONS

| CROP | DISEASE Seed and Soilborne Diseases: | FLUID OUNCES RAXIL-Thiram Flowable Fungicide | REMARKS |
|-------------------------|---|--|--|
| Wheat Barley Oats | <u>Wheat:</u> Stinking Smut Flag Smut Loose Smut Early Season <i>Septoria</i> Disease Complex General Seed Rots <i>Pythium</i> Damping-Off Early Season <i>Rhizoctonia</i> Root Rot Early Season Common Root Rot Seedborne <i>Fusarium</i> Scab Early Season <i>Fusarium</i> Foot Rot Early Season Suppression of Powdery Mildew Early Season Suppression of Wheat Leaf Rust | 3.5 to 4.6 fluid ounces per 100 pounds of seed | SEED TREATMENT: Application of RAXIL-Thiram Flowable Fungicide at the recommended rate per 100 pounds of seed should be made using standard slurry or mist-type seed treatment equipment. Uniform application of seed is necessary to ensure seed safety and best disease protection. Seed should be sound and well cured prior to treatment. Product should be diluted with sufficient water to give an applied slurry rate of 9 to 20 fluid ounces per 100 pounds of seed. |

RECOMMENDED APPLICATIONS(Continued)

| CROP | DISEASE Seed and Soilborne Diseases: | FLUID OUNCES RAXIL-Thiram Flowable Fungicide | REMARKS |
|------|---|--|--|
| | <u>Barley:</u> Covered Smut Loose Smut Barley stripe (suppression) General Seed Rots Pythium Damping-Off Early Season <i>Rhizoctonia</i> Root Rot Early Season Common Root Rot Seedborne <i>Fusarium</i> Scab Early Season <i>Fusarium</i> Foot Rot Early Season Suppression of Powdery Mildew Early Season Suppression of Barley Leaf Rust <u>Oats:</u> Loose Smut General Seed Rots Pythium Damping-Off Early Season <i>Rhizoctonia</i> Root Rot Early Season Common Root Rot Seedborne <i>Fusarium</i> Scab Early Season <i>Fusarium</i> Foot Rot Early Season Suppression of Powdery Mildew Early Season Suppression of Crown Rust | 3.5 to 4.6 fluid ounces per 100 pounds 3.5 to 4.6 fluid ounces per 100 pounds | Do not graze Barley or Wheat for 31 days and Oats for 30 days after planting. Use low rate under dryland or low rainfall conditions and consult your area agronomist regarding planting depth recommendations for the particular variety to be planted. |

NOTICE - READ CAREFULLY

CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Gustafson, Inc., no claims are made to guarantee germination of carry-over seed.

As its sole express warranty, Gustafson, Inc., warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. ONLY AS PERMITTED BY APPLICABLE LAW, IN THE EVENT OF A BREACH OF THIS LIMITED WARRANTY, GUSTAFSON, INC. SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES. SUBJECT TO APPLICABLE LAW, GUSTAFSON, INC. NEITHER MAKES NOR AUTHORIZES ANY OF ITS AGENTS OR REPRESENTATIVES TO MAKE ANY WARRANTY OF FITNESS OR MERCHANTABILITY, GUARANTY OR REPRESENTATION, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL. Buyer assumes the responsibility to handle, use and store this product in accordance with the safety instructions and use directions contained on the label.

Buyer/User purchases this product subject to the foregoing Conditions of Sale and Limited Warranty, which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of Gustafson, Inc. If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.

A quality product manufactured by:
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151(S)792070